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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/578,893

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Janne Johannes Peisa

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EXAMINER

BATISTA, MARCOS

ART UNIT

PAPER NUMBER

4134

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/578,893	Applicant(s) PEISA ET AL.	
	Examiner MARCOS BATISTA	Art Unit 4134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>05/11/2006, 08/01/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 15 and 27 are objected to because of the following informalities: Claim 15 contain the limitations “Jub/Jur” and “UlvITS” in line 1. Claim 27 contains the limitation “lub/Jur” in line 3. “Jub/Jur” should be changed to --lub/lur – in claims 15 and 27 and “UlvITS” should be changed to –UMTS—in claims 27.

They will be examined under the assumption that these limitations should read “lub/lur” and “UMTS” respectively as supported by the specification (see abstract). Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isnard et al. (US 20030219005 A1), hereafter “Isnard,” in view of Landaveri et al. (US 20030103508 A1), hereafter “Landaveri.”

Consider claim 15, Isnard discloses a method of transporting data over the lub/lur interface of a UMTS Terrestrial Radio Access Network, UTRAN, in which frame

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synchronization at the receiving node (1) is achieved by delaying the sending of data frames from the sending node (2) by an offset delay, the method comprising: for data services, defining an initial offset delay and dynamically varying the delay at the sending node based upon Time of Arrival feedback received from the receiving node, to optimize the offset delay value (**see figs. 1 and 4, pars. 0049 lines 9-11 and 0050 lines 1-6, 27-35**).

Isnard discloses the invention of claim 15 above, but does not particular refer to for speech services, defining said offset delay as a substantially fixed delay.

Landaveri, in analogous art, teaches for speech services, defining said offset delay as a substantially fixed delay (**see par. 0054 lines 27-31**).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Isnard and have it include for speech services, defining said offset delay as a substantially fixed delay, as taught by Landaveri. The motivation would have been in order to guarantee the delivery of real-time voice frame with minimal interruption (**see par. 0054 lines 27-31**).

Consider claim 16, Isnard discloses a node (1) for use in a UMTS Terrestrial Radio Access Network, UTRAN, the node comprising: means for transmitting data frames to one or more receiving nodes (2) via lub/lur interfaces with an initial timing offset (**see figs. 1 and 4, pars. 0049 lines 9-11 and 0050 lines 1-6, 27-35**); and means

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for applying dynamically varying the offset for data services based upon Time of Arrival feedback received from the receiving node(s) (**see figs. 1 and 4, pars. 0049 lines 9-11 and 0050 lines 1-6, 27-35**).

Isnard discloses the invention of claim 16 above, but does not particular refer to maintaining the timing offset substantially constant for speech services.

Landaveri, in analogous art, teaches maintaining the timing offset substantially constant for speech services (**see par. 0054 lines 27-31**).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Isnard and have it include maintaining the timing offset substantially constant for speech services, as taught by Landaveri. The motivation would have been in order to guarantee the delivery of real-time voice frame with minimal interruption (**see par. 0054 lines 27-31**).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 17-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Isnard et al. (US 20030219005 A1).

Consider claim 17, Isnard discloses a method of optimizing the timing offsets with which data frames are transmitted over the lur/lub interfaces of a UMTS Terrestrial Radio Access Network, UTRAN, the method comprising: for a given lur/lub interface or set of lur/lub interfaces over which identical user plane data is to be sent, defining a duration of a data frame receiving window for use by the receiving node(s) (**see figs. 1 and 4, par. 0003-0004, 0012, 0057**); transmitting data frames from a sending node with an initial timing offset (**see pars. 0059 and 0063**); reducing the timing offset at the sending node in a stepwise manner (**see fig. 4, par. 0034 – the calculation is done by either extending or reducing the transmission time**); and adjusting the timing offset at the sending node in response to the receipt of late Time of Arrival error reports at the sending node (**see par. 0058 lines 10-14**).

Consider claim 18, Isnard discloses wherein upward adjustments in the timing offset are carried out in steps which are greater than the steps by which the timing offset is reduced (see par. 0056).

Consider claim 24, Isnard discloses wherein the sending node is one of a Radio Network Controller, RINC, or a Node B, and each receiving node is the other of an RNC or Node B (see fig. 5, par. 0055).

Consider claim 25, Isnard discloses wherein said initial timing offset is sufficient to ensure a likelihood that the frames will be received at the or each receiving node within the defined receiving window (see pars. 0059 and 0060).

Consider claim 19, Isnard discloses a method of optimizing the timing offsets with which data frames are transmitted over the lur/lub interfaces of a UMTS Terrestrial Radio Access Network, UTRAN, the method comprising (**see figs. 1 and 4**): for a given lur/lub interface or set of lur/lub interfaces over which identical user plane data is to be sent, defining a duration of a data frame receiving window for use by the receiving node(s) (**see par. 0057**); transmitting data frames from a sending node with an initial timing offset (**see pars. 0059 and 0063**); at the or each receiving node, collecting and/or computing Time of Arrival statistics for received data frames (**see fig. 5, par. 0055 lines 11-17**); periodically reporting said statistics to the sending node (**see pars. 0032 and 0061**); and adjusting the timing offset at the sending node on the basis of the received statistics (**see par. 0061**).

Consider claim 20, Isnard discloses wherein the collected statistics include one or more of; the mean, minimum, maximum, and variance of Times Of Arrival for data frames received during some time period (see pars. 0033 and 0040).

Consider claim 21, Isnard discloses sending from the sending node to the or each receiving node instructions identifying the statistics to be collected at the receiving node and sent to the sending node (see fig. 7, pars. 0033 and 0067).

Consider claim 22, Isnard discloses wherein said instructions identify the regularity with which the statistics must be sent, or events defining when the statistics should be sent (see fig. 7, par. 0067).

Consider claim 23, Isnard discloses sending polling requests from the sending node to each receiving node instructing the return of statistics (see pars. 0040 and 0067).

Consider claim 26, Isnard discloses a node (1) for use in a UMTS Terrestrial Radio Access Network, UTRAN, the node comprising: means for transmitting data frames to one or more receiving nodes via lub/lur interfaces with an initial timing offset **(see figs. 1 and 4, pars. 0049 lines 9-11 and 0050 lines 1-6, 27-35)**; means for reducing the timing offset in a stepwise manner **(see fig. 4, par. 0034 – the calculation is done by either extending or reducing the transmission time)**; and means for

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adjusting the timing offset in response to the receipt of late Time of Arrival error reports **(see par. 0058)**.

Consider claim 28, Isnard discloses wherein the node is a Radio Network Controller or a Node B (see fig. 1, par. 0055).

Consider claim 27, Isnard discloses a node for use in a UNITS Terrestrial Radio Access Network, UTRAN, the node comprising: means for transmitting data frames to one or more receiving nodes via lub/lur interfaces with an initial timing offset **(see figs. 1 and 4, pars. 0049 lines 9-11 and 0050 lines 1-6, 27-35)**; and means for receiving statistical data sent periodically from the or each receiving node and relating to the Times of Arrival of data frames at respective receiving nodes, and for adjusting the timing offset on the basis of the received statistics **(see pars. 0032 and 0061)**.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Marcos Batista, whose telephone number is (571) 270-5209. The Examiner can normally be reached on Monday-Thursday from 8:00am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Lun-Yi Lao can be reached at (571) 272-7671. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Marcos Batista
/M. B./
04/28/2008

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/LUN-YI LAO/

Supervisory Patent Examiner, Art Unit 4134